

**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1.-27. (Canceled)

28. (Original) A core for use in a motor, said motor including N and S magnetic poles for generating a magnetic field to which said core is opposed, said core comprising:

a plurality of slots formed in said core,

wherein said core is made of upper, middle, and lower thirds and pole winding parts of said core are made narrower in the upper and lower thirds than the middle third.

29. (Original) The core as described in claim 28 wherein

in a case where a number of magnetic poles is  $4m$  and a number of core slots is  $3m$  ( $m$  is an integer),

core shapes of the upper and lower thirds are identical, and each of these thirds is configured so that salient pole tips are disposed at an equal angular pitch, and opening angles of said salient pole tips are set to an angle equal to an electrical angle  $\gamma$  ( $145^\circ$  to  $160^\circ$ ) – one-quarter the cycle of basic cogging torque ( $(\gamma/m - 90/k)^\circ$  in mechanical angle, where  $k$  is the least common multiple of  $2m$  and  $3n$ ), and

a core shape of the middle third is configured so that salient pole tips of said core are disposed at an equal angular pitch, and opening angles of said salient pole tips are set to an angle equal to the electrical angle  $\gamma$  ( $145^\circ$  to  $160^\circ$ ) + one-quarter the cycle of the basic cogging torque ( $(\gamma/m + 90/k)^\circ$  in mechanical angle).

30. (Original) The core as described in claim 28 wherein

in a case where a number of magnetic poles is  $4m$  and a number of core slots is  $3m$  ( $m$  is an integer),

core shapes of the upper and lower thirds are identical, and each of these thirds is configured so that salient pole tips of said thirds are disposed at an equal angular pitch, and

opening angles of said salient pole tips are set to an angle equal to an electrical angle  $\delta$  ( $205^\circ$  to  $220^\circ$ ) – one-quarter the cycle of the basic cogging torque  $((\delta/m - 90/k)^\circ$  in mechanical angle, where  $k$  is a least common multiple of  $2m$  and  $3n$ ), and

a core shape of the middle third is configured so that salient pole tips of said third are disposed with an equal angular pitch, and opening angles of said salient pole tips are set to an angle equal to the electrical angle  $\delta$  ( $205^\circ$  to  $220^\circ$ ) + one-quarter the cycle of the basic cogging torque  $((\delta/m + 90/k)^\circ$  in mechanical angle).

31. (Canceled)

32. (Original) The core as described in claim 28 wherein

said core is structured by combining a plurality of separated cores whose inner walls of a plurality of salient poles are joined by an annular part.

33. (Canceled)

34. (Original) The core as described in claim 32 wherein

said separated cores are shaped identical.

35.-39. (Canceled)

40. (Original) The core as described in claim 28 wherein

said core is structured by laminating thin plates of magnetic material.

41.-46. (Canceled)

47. (Original) A motor including:

(a) magnetic field generating means having N and S magnetic poles for generating a magnetic field; and

(b) a core made of magnetic material and opposed to said magnetic field generating means;

wherein one of said magnetic field generating means and said core rotates with respect to the other, and

wherein said core is made of upper, middle, and lower thirds, and pole winding parts of said core are made narrower in the upper and lower thirds than the middle third.

48.-51. (Canceled)

52. (Original) The motor described in claim 47 wherein

in a case where said magnetic field generating means is a magnet, and a number of magnet poles is  $2m$  and a number of core slots is  $3n$  ( $m$  and  $n$  are integers), polarization is performed at a skew angle of  $(200/k)^\circ$  or less in central angle ( $k$  is a least common multiple of  $2m$  and  $3n$ ).

53.-56. (Canceled)

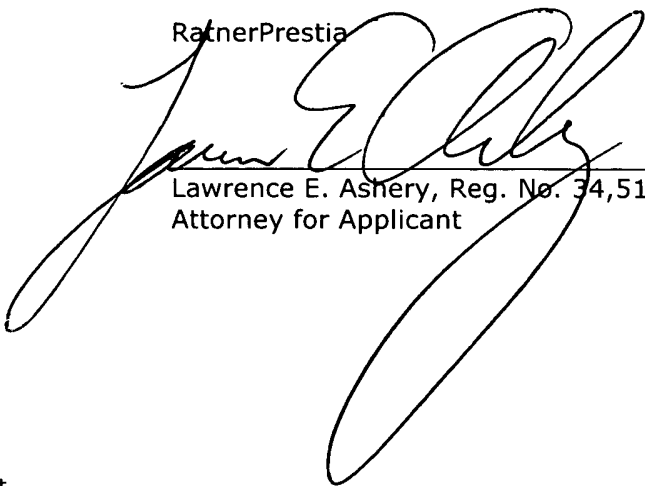
57. (Original) The motor described in claim 52 wherein

polarization is performed at a skew angle ranging from  $(80/k)^\circ$  to  $(100/k)^\circ$  in said central angle.

58. (Canceled)

Respectfully submitted,

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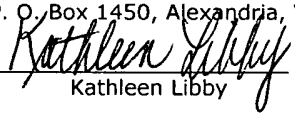
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